4: Tew E.-[illegible] (no date) 1950 FN17 Ngonde FN17
Nyakyusa

The use of cattle dung as manure is a novelty now used in the cultivation of coffee, but not on gardens unless land is beginning to be scarce. Banana cultivation is a characteristic feature of Ngonde as well as of Nyakyusa economic life.[1] Each homestead in a village includes the houses of a man and his wives, his banana groves, coffee-trees planted under the bananas, and also plots of beans, ground-nuts, &c. The main gardens of the household lie at some distance. Each year different types of gardens are hoed together by groups of villagers, millet in one place, maize and beans in another, so that the main gardens of any particular household are scattered. The clearing and hoeing fall to the man and his sons, and the wives are then given portions of their own to plant. Traditionally women never used to hoe at all.

The rights of a woman to dispose of her crops vary. Millet and rice, the two most valuable crops, are stored by the man and belong to him. The woman is the effective owner of all other crops on her plot, and stores them in her own house. Crops are used for food, beer, and hospitality, for making gifts, as well as for sale or barter, to obtain salt, pots, chickens, and cattle. There is a sharp division of property between co-wives. Not only garden land, but also banana-trees are divided between them. The husband often keeps a separate plot of bananas and cassava over which he has full rights of ownership. The farming unit is the family, but communal hoeing parties are organized two or three times a year, food and beer being offered to the workers.[2]

On the lake-shore plain rice is cultivated. The Ngonde plain is the main rice-growing area of Nyasaland. Floods in the rainy season make possible the cultivation of lowland rice, or paddy, which is superior in yield to upland grown crops. The most fertile areas are usually flooded during the rainy period of December–April, so as to be unfitted for the cultivation of other food crops at that time. But the Ngonde construct huge mound-like ridges in their newly harvested rice gardens, and plant on them subsidiary crops—maize, beans, sweet potatoes, cassava, or cotton. When these are harvested the garden is levelled again in readiness for another rice crop. Harvesting of rice and winnowing is usually women's work.[3] The crops are stored when threshed but unhulled, or unthreshed. They are milled by pestle and mortar. The rice is marketed with Indian traders in Mwenye and Lindo townships.[4]

Cattle

Cattle take a foremost place in Ngonde economy, and milk is an important article of diet. Ngonde herdsmen were much in request in Shire province.[5]

Nyakyusa cattle are tied up at night in the dwelling houses,[6] and are herded in the day by small boys. Milking is invariably done by the men; the women are not allowed to have anything to do with cattle.[7] Every year at the end of the dry season, in October or November, some of the pastures are fired to bring out the new shoots at the first rains. This is the only use of burning in their economy.[8] The rinderpest outbreak of 1896 decimated the herds,[9] but since then the number of cattle has increased considerably, numbering over 33,000 head in 1931 and about 40,000 head in 1938.

[1] Werner, 1930, p. 220.
[2] Baker, 1939.
[3] Johnston, 1897, p. 431; Werner, 1930, pp. 219 and 224.
[4] Werner, 1930, p. 220, notes that Ngonde cattle and herdsmen sleep together in long rectangular huts.
[5] Wilson, J., 1938, p. 8.
[6] Wilson, J., 1938, pp. 18–19.
[7] Werner, 1930, p. 228.
[8] Ibid.
[9] Johnston, 1897, p. 431.

10:Culliver Z-5 (1954-1955)1956 F307 Ngoade F307
Nyakyusa

and try to understand the nature and reasons for change. Here, then, is a good opportunity for the study of social change - not only in land tenure as such, but also in village and family organization, political authority and economic life.

II

The Nyakyusa are a Bantu people inhabiting the main part of the Rungwe District in southern Tanganyika, immediately to the north of Lake Nyasa. In 1948 they numbered about 190,000 in that District, but about 10,000 more were probably at the time temporarily absent from their homes and in employment in the mines and towns of the Rhodesias and South Africa (see Culliver, 1957), while about 20,000 had migrated to live in the adjacent Mbeya District to the north.

The tribal area comprises a confined geographical basin surrounding the northern end of Lake Nyasa. It extends only about 40 miles from the tip of the lake at 1,550 feet above sea level to the Poroto Mountains to the north at 8,000 feet; and from east to west is only about 30 miles, from the almost sheer walls of the Livingstone Mountains (with peaks up to 10,000 feet) to the Ndali Highlands rising to about 7,000 feet). There are therefore unusually large ecological differences within so small an area. Three major regions are to be distinguished: the "Northern Highlands" over about 4,500 feet, the low-lying "Lake Plains" to the south, and the "Central Region" in between. Everywhere rainfall is reliable and high, averaging at least 100 inches annually[1], and this amply compensates for a certain poverty and misuse of the soil, although (and particularly in the Central Region) it brings dangers of soil erosion. Except in the highest parts the banana is the staple food, supported by maize, beans, finger millet and groundnuts. In the Northern Highlands coffee has become well established as the principal cash crop; in the Lake Plains paddy rice cultivation provides both a food and a cash crop; in the Central Region the country is too low generally for coffee and too high and dry for rice; consequently cash-cropping is considerably inferior and the people's standard of living is rather poorer.

The Nyakyusa and their country tended for a long time to be relatively isolated from the outside world by high mountain walls and ruin-worked roads. In addition, or because of it perhaps, they developed an almost unique culture which was supported by considerable conservatism and high insularity. They still continue to regard their African neighbours beyond the mountains as their social and cultural inferiors. The turmoil of the slave-trade in Central Africa passed them by; in modern times they have not enthusiastically accepted Christianity and they have refused to take up the use of Swahili, the *Territorial lingua franca*. In recent years, and more especially since the end of World War II, they have, however, accepted and pushed forward with vigour a rapid and extensive economic development, involving particularly the production of coffee and paddy as cash crops, and large-scale labour migration to the south to the high-wage mining industries. The multiplicity of petty, often tiny, independent chiefdoms has been reorganized to provide four local government areas, each under a Rural Council, in which the old chiefdoms have become something like parishes[2]. Although much of the old conservatism and narrow parochialism persists, yet there is now an atmosphere of accepted change, of a keen desire for economic development, and a general acceptance of a cash economy.

Probably the most significant feature of modern life in the Nyakyusa country is the increasing scarcity of land for agriculture in relation to the

1. [illegible]
2. [illegible]

10;Oulliver E-5 (1954-1955)1958 F167 Ngondo F167
Nyakyusa

161 If therefore, pending the next Census to be made in 1957, we assume these rates of increase, then by 1955 it may be estimated that the Nyakyusa numbered about 317,000 at an average density of 233 persons per square mile, allowing 13.7 acres of land per family of five. For the Lake Plains alone, the population in 1955 would have been nearly 60,000 at an average density of 287 persons per square mile, with 11.2 acres per family. If we also include the estimated number of absentee migrant labourers in the base year of 1948, then there were in 1955 perhaps 63,000 people dependent on the land resources of the Lake Plains at an average density of 302 per square mile, though in fact some 6,000 men were temporarily absent from home in that year.

The figures and estimates are given in Table I. These averages do, of course, hide some considerable and significant local variations which are further described at pages 14 ff. below.

162 TABLE I
NYAKYUSA POPULATION

	1948 Census			1955 Assessment		
	p	D	f	p	D	f
Lake Plains at increase of 17% p.a.	51,700	250	12.8	60,700	287	11.2
Central Region at increase of 15% p.a.	46,000	224	14.2	53,000	248	12.9
N.E. Highlands at increase of 15% p.a.	40,000	181	17.6	46,700	212	15.3
N.W. Highlands at increase of 15% p.a.	53,200	180	17.7	59,000	200	15.4
Nyakyusa in tribal area	191,700	212	15.2	317,200	233	13.7

p = population
D = persons per square mile on land available for African use.
f = average acreage available per family of 5 persons.

Assuming that there were in 1948 about 3,000 men temporarily absent from their homes in the Lake Plains but who remained dependent on the land resources of that region, then the following estimate may be made:-

Lake Plains - persons resident at home and temporarily abroad:-

p	D	f	p	D	f
54,700	262	11.5	62,933	303	10.6

The approximate areas available for African use in the tribal lands (excluding alienated land, forest reserves and main roads) are:-

Lake Plains - 208 sq. miles
Central Region - 217 sq. miles
N.E. Highlands - 230 sq. miles
N.W. Highlands - 288 sq. miles
Nyakyusa - 933 sq. miles

In these calculations no account is taken of unsuitable land such as swamps, steep slopes, rocklet, etc.

Cash Cropping: Paddy Cultivation

163 This condition of a high density of population exists in a modern 450 economy in which cash-cropping is universally accepted and desired. Under the former subsistence agriculture, because of heavy rainfall and natural annual flooding, quite small-sized holdings were adequate to satisfy a family's food requirements. Two harvests a year are easily obtained in some combination of maize, beans, groundnuts and finger millet, with a few small 241 "luxury" crops; and the banana groves yield continuously. The Nyakyusa were and are extremely fortunate in their food supply, and seldom experience shortages such as commonly or even commonly affect many peoples of East Africa.

● 243 (249) Rice was first introduced in 1896 by two chiefs who obtained the seed from Nyasaland Arabs; and in 1898 the Moravian Mission and a Swedish

Sk:Gulliver E-5 (1954-1955) 1954 F307 Ngende F307
Nyakyusa

trader brought in other seed. The trader himself planted a large plot and his success seems to have stimulated the Nyakyusa to follow suit. There was a slow but gradual development of planting and by 1937 it was estimated that some 300 tons of hand-hulled rice were sold. It had become clear that the alluvial flood plains around the northern tip of Lake Nyasa were ideally suited to paddy growing. Until 1942 the people continued to hand-hull their crop and sell the rice, but in that year they were persuaded to sell the paddy direct to a locally established mill. Following initial difficulties in milling, handling and marketing, the Government built a store capable of holding 14,000 bags and it also took over the whole of the marketing with a seconded District Officer in charge. In 1947 the cultivators formed their first co-operative society. This movement has been encouraged by Government and the local Co-operative Union now deals with storage and marketing with the guidance of a Government Co-operative Officer.

The figures of sales of rice and paddy are given in Table II.[1]

Paddy has become a well-established crop, not only as the single cash crop of the region, but also as a food crop second only (or even equal) to the traditionally staple banana. About four-fifths of all arable holdings are paddy fields – though parts of these are used for dry season crops of maize, beans, etc. Virtually every Nyakyusa land-holder now grows paddy, and the vast majority regard it as their main crop. Cultivation is mainly by ox-plough followed by broadcast sowing and hand-weeding. Government efforts to encourage nurseries and planting out in rows have so far been entirely unsuccessful. Yields and perhaps quality too are thought to be lower than used to be; the chief factor in production seems to be the degree of natural flooding during the wet season.

TABLE II

SALES OF RICE AND PADDY, 1950-56*

	tons		tons
1950	1,200	1953	1,800
1951	1,400	1954	2,000
1952	1,600	1955	2,200
		1956	2,400

* 1950-52 – hand-hulled rice, estimates only
1953-55 – paddy and hand-hulled rice, official figures
1956 to – paddy, and through Government agency

The cultivation of paddy requires relatively large-sized holdings due to the nature of the crop and the local extensive method of agriculture – for example, to produce a given income requires a far larger area of paddy in the Lake Plains than of coffee in the Northern Highlands of Nyakyusa country. As paddy cultivation became established, men increased their arable holdings in order to earn their money incomes. Larger holdings, rather than improved agricultural techniques, have become directly associated with higher incomes, and as the demand for more land set in, assisted by the now general use of ploughs, paddy growing increased rapidly wherever it was found ecologically possible – i.e., within the alluvial flood plains and the convenience area of annual natural flooding. Before this new demand for land emerged there were, even in the most highly populated parts, extensive areas which were more or

1. Information for this supplied by the Co-operative Officer, Tukuyu.

Bl:Chilliver E-5 (1954-1955)1958 F'617 Ngondo F'617
Nyakyusa

low conditioned. These areas can easily be picked out today by the absence of village sites and banana groves. There was something of a rush to grab land in such areas and in the less densely populated parts of the chiefdoms. Today in my personal experience – for no general survey has been attempted – there remains little or no unused land within the paddy-growing regions which can, by native techniques, be brought under the plough; and indeed men are attempting to grow paddy on unsuitably raised land where inundation is inadequate. Communal cattle pastures have shrunk as arable holdings extended until they remain only where cultivation is prohibited.

The demand for land has far outrun the physical supply, and in 1955 it still seemed to be insatiable. The initial cycle was that a desire for more money to permit of a higher standard of living created a demand for more land on which to produce more cash crops; but the increased level of income then further stimulated money demands to raise standards higher again, thus bringing a renewed demand for land. The cycle has now been halted by the lack of further land to meet the people's needs, but the demand remains unsatisfied and is indeed increased by rising costs of living.

This economic picture is, of course, oversimplified, but it may serve to illustrate the nature of forces at work in the situation. I would not wish to overemphasize the snowball effect, for the bulk of the population remains still largely content with only a little over earlier standards; but increasing numbers of men and their families are coming to seek something better. Bicycles have become something of a general necessity; a variety of good clothing and shoes is considered quite essential. Only a single decade before the Nyakyusa women still generally went about in the traditional nudity, whereas in 1955 they must have ranked among the very best-dressed African women in the Territory. European-type household goods, crockery and utensils are common. The demand for money, that is for a higher standard of living, has also been greatly stimulated by the experiences of the thousands of labour migrants returning from southern towns and mines, and by the cash and goods they bring back with them.[1]

It is not possible for me to attempt to suggest what a desirable acreage would be for a contemporary Nyakyusa, because money demands, crop yields and selling prices change and the desire for higher standards of living also alter as the potentialities of the new cash economy are increasingly understood. In 1934 the approximate average of Sh.20/- per paddy cultivator was earned from perhaps two or three acres of arable land, but as unfavourable season of the crop was kept back for home food requirements. As will be shown later many men's paddy fields could have been little more than an acre, and many men, especially young men, had no paddy land at all. Certainly there were few who held what they considered, at a reasonable estimate, to be sufficient land.

This universal cash crop agriculture and the continuing demand for higher standards of living, and therefore for higher money incomes, is the real cause of the new and rather sudden pressure of population on the land. Of course this economic process operates within a situation of relatively dense population and in a peasant community where land is almost the only form of capital and alternative enterprise is small. The gradual increase of population, although probably small, further aggravates the difficult situation.

Arable Holdings

It was not possible to obtain adequate, satisfactory data to allow the calculation of local population densities, and the detailed results of the 1948

[1] In 1948 (p. 127), an estimate of the cash income of Nyakyusa in 1934 is given as £1. 0.0. Since on the 1948 figures this is misleading (labour migration not given as p. 8).

(430) 311 423 production, young men seeking their own independent holding, and newcomers to the villages who seek to settle there.

The modern shortage of land has therefore considerably increased the authority and the activities of the village headman. Nowadays he is the prime mover in all changes in land-holding, other than by inheritance or temporary lease and gifts. In these latter, and particularly in inheritance, he has necessarily become an important concerned party whose influence cannot be ignored, whose approval is desired and whose assistance is frequently sought both as arbiter and witness. Much more than before, and directly because of the scarcity and value of land today, he is the principal controller and allocator of land – though, of course, he remains subject to the state of public feeling and the opinions of his villagers. His position has been further strengthened by his status at the base of the administrative hierarchy in modern local government, whereby he is given executive responsibility for his village and its people. As always, disputes over land are taken before him in the first instance and here he acts not only as a judge but also as the expositor of village opinion and public knowledge. Such disputes are increasing in number, giving him more work and responsibility and also more opportunity for the expression of his status. Meanwhile his traditionally crucial ritual and magical (anti-witchcraft) powers continue, though now in somewhat attenuated form.

Fragmentation and Dispersion of Holdings

423 452 311 It has been shown how the inheritance of land, now of increasing importance, results normally in the splitting up of a man's holding.[1] Whether a young man obtains an inherited share of his father's land or he obtains an allocation in another village, its size is likely to be small – smaller than the holdings of his father's generation. Tiny, uneconomic plots are to be seen everywhere in the flood plains.

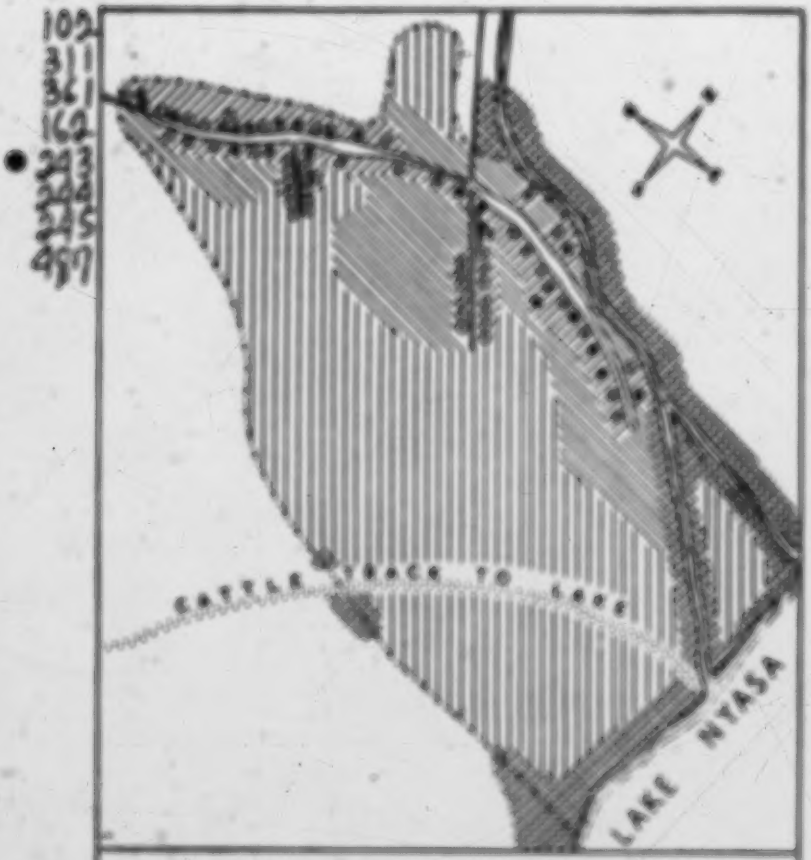
At the same time a man's holding is tending to comprise a scattered, heterogeneous collection of small plots, as he has obtained land when and where he could. An actual example will illustrate this: a young man had (341) about a tenth of an acre behind his house on which he was growing maize and beans; he had about a quarter of an acre which was his share of his deceased father's land, and another quarter of an acre which had been (343) allocated to him by the headman when a vacated holding was split up, and on both of these he cultivated paddy. This man had only small hope of obtaining more land, unless one of his brothers died without sons, for he had already been refused by the headman a share in a recently vacated holding on the grounds that, unlike many of his contemporaries, he already had at least some arable land.

Even amongst older men the holding of scattered plots is common. This is partly the result of the earlier expansion of cultivation when the formerly unused lands were put under paddy, and partly because older men too, lose no opportunity, in the face of scarcity, to take up any land they can. The Nyakyusa ideal is to have a single large holding, preferably stretching away behind the homestead – or alternatively two fields, one for paddy out in the open plains and one for food crops nearer home. This ideal becomes less and less practicable. There seems to be little or no need for this scatter of plots on account of soil and fertility differences, for these are generally few and unimportant within the area of a single village.

311 423 In my sample villages the average number of separate plots was about three per holding. There was a notable difference between villages in relation to the average size of villagers' holdings. Where land was more plentiful the

1. [illegible]

10:Gulliver E-5 (1954-1955)1958 FN17 Ngonde FN17
Nyakyusa



SKETCH PLAN OF KAPUGI VILLAGE
KOROSOS CHIEFDOM 1955

[Facing p 29]

10:Oulliver E-5 (1954-1955) 1958 F917 Ngonde F917
Nyakyusa

TABLE V

DISTRICTS IN TANGANYIKA WHERE LAND DISPUTES ARE COMMON

	No. of land cases	% of total land cases	Estimated population	Population per land case
1955				
Bukoba District	1,169			
Lushoto District	678			
Moshi District	636			
Mpwapwa District	96			

The Changing Village

The possibly unique age-village of the Nyakyusa is now undergoing considerable and fairly rapid change in response to the new conditions of land shortage. There is, firstly, an increasing sense of village exclusiveness and, secondly, there has been a breakdown in the essential age-basis of its organization. That is to say, that whilst the corporate unity of the village as an independent group has been strengthened, yet the social foundations of the village has simultaneously been changed and a different sort of village is emerging. It would take us far beyond the scope of this present essay if a full analysis of the changing village were to be made, nevertheless in so far as these changes are more or less directly the consequences of modern land shortage, land tenure and economic conditions some account is essential. Since the age-village was fundamental in the life and social organization of these people, the new emerging village is of crucial importance.

Land shortage has definitely exaggerated the unity and exclusiveness of the village in the Lake Plains at a time when, for other reasons, it was beginning to become a more open group. There was always, as we have seen, insistence on the principle that only a member of the village could hold and use village land; but village boundaries were often poorly marked and it was difficult to determine which headman, if any, had genuine jurisdiction over land relatively distant from the constituted village site. Nor was it particularly important to be able to do so whilst land was plentiful. As paddy cultivation spread, men began seeking more fields further and further away from home as land nearby was all taken up; and so long as they did not attempt to take land in the immediate vicinity of another village site there was seldom much difficulty in this. The attitudes born of a sufficiency of land persisted and headmen were not disposed to protest against outsiders who sought fields near the limits of their vaguely defined areas. Intervillage warfare and raiding had, of course, been abolished as an expression of and a weapon in inter-village rivalries and animosities. With the establishment of general peace and security, and with increasing movement about the country between villages and chiefdoms, such rivalries and animosities began to die away. Many men came to live in the villages which they themselves had not helped to found; their convals from their fathers' villages lived elsewhere, many of them widely scattered, and it was not possible to maintain a high degree of village patriotism, and, people began to feel, it was not especially necessary or important any longer.

It began to be possible for a man to hold some of his arable land within the area of another village, so long as members of the second village were not deprived of the opportunity of their own agricultural expansion should they desire it. This was especially the case where a large area of hitherto vacant (i.e. bush) but now valuable paddy land was contained within the approximate boundaries of a village. Outsiders were allowed to acquire fields on the strength of kinship with the headman or with one of the established villagers, or even by giving some small present to the headman (e.g. a little beer or some meat, etc.). Land was still plentiful then, or so it seemed to the Nyakyusa, and future shortages and difficulties were not perceived.

10:Gulliver E-5 (1954-1955)1958 FNI7 Nyanda FNI7
Nyakyusa

311
333 Whereas in the Highland and Central regions the large numbers of cattle – in relation, that is, to the available pasture resources – are causing over-grazing and soil erosion, particularly in the hilly areas on often unsuitable rangeland to pasturage, on the other hand in the flood plains there does not appear, at least to the layman, to have been any serious effects on the land. 349 The natural manuring of the paddy fields in the dry season is advantageous. In the Lake Plains it is the cattle rather than the land which suffer, but so far the Nyakyusa have done virtually nothing to meet the new conditions, other than to complain bitterly and fruitlessly.

The Young Men: Land Shortage and Labour Migration

433 The younger Nyakyusa men find increasing difficulty in obtaining arable land now that there are no longer vacant areas to be taken up, and the older men are no longer prepared to cede their land rights in favour of the younger generation, as they traditionally did. When occasional fields are left vacant, the young men must take their turn with their elders, who themselves are so chronically short of land – and the headmen consequently favour the older villagers with families as against the younger men. This means that in the high-density regions the majority of men under the age of about 30 years have little or no arable land, nor can they hope for it until the deaths of their fathers. In the congested village sites even their bananas plots may be smaller than is desirable for the provision of the staple food.

508 The young man, then, is compelled to remain dependent on his father's 176 and elder brother's holding; indeed, brothers often justify their refusals to allocate plots to young men on the express grounds that the latter must share their elders' fields. Thus the natural independence of the young Nyakyusa is severely restricted and it seems that tensions and difficulties are beginning to arise between fathers and sons, and between brothers, because of this. Sons are blamed for not doing their fair share in the family cultivation; fathers are blamed for giving their sons inadequate shares in crops and crop incomes. It will be remembered that one of the fundamental principles underlying Nyakyusa society and its age-village organization is the spatial segregation of parents and children (*cf.* page 22). Now they are inevitably being put into competition with one another over inadequate fields in a single holding.

The young men are severely restricted, if not altogether cut off, from the 284 opportunity to cultivate paddy in their own fields and thus to earn their incomes at home, for paddy-growing is the only way of earning a living in the 345 Lake Plains. Yet it is these younger men whose money demands are greatest, to buy clothing, bicycles and other store-goods, and to buy cattle for marriage payments. They are therefore strongly attracted by the ready opportunities for taking up wage-labour abroad, in the mines of the Rhodesias and South Africa where wages are high (see Gulliver, 1957).

With the best will in the world, when, as in the very high-density regions, the average holding is little more than an acre and a half – when, that is, the older men themselves desire larger acreages for their own cultivation needs – it is not possible for a father to allow his son to take large shares in his fields. In some cases a father does give outright to his adult sons strips of his holding, but plots so provided are necessarily small. Quite as frequently a father does not consider it possible to break up his holding in his own lifetime, and sons are expected to assist in the common cultivation and to continue merely to be given a share in the family proceeds at harvest. It is not surprising, therefore, that very large numbers of young men from the Lake 347 Plains migrate abroad to work. Only about one man in 20 has not been away at all before the age of about 25 years. Much higher proportions of men and larger numbers absolutely are temporarily absent from the Lake

[C5894]

in thickness. This part is devoid of timber except along some river banks—*Albizzia* and *Acacia* spp.—and fuel has to be carried some distance. The dominant herbs are *Cymbopogon citratus* and *Hyparrhenia* sp., with *Pennisetum* and *Pennisetum purpureum* along the rivers.

Methods of Cultivation

The work of cultivation is equally divided between the sexes. After the plots have been cleared and bunded by the men, it is women's work to plant, clear, harvest, winnow and sell at the market. Men's work consists of clearing, hoeing and looking after the cattle.

Rotation of crops is practised, as it must be in an area where all land is far from productive. In the highlands, 5,500 feet to 7,000 feet, the rotation in valleys is sweet potatoes, finger millet, groundnuts, finger millet, groundnuts, finger millet and rest for five years, or sweet potatoes, maize for five years and rest for five years. On the hillsides, finger millet and pigeon pea or finger millet alone are sown every fourth year.

In the medium altitude, between 5,000 feet and 5,500 feet, the rotation is finger millet, maize and yams, beans, rested and grazed. Continual planting of the cassava take place as fertility is so quickly impaired.

In the lower altitudes, below 2,000 feet, rice is planted continuously for some 15 years and the land is then rested and grazed for about 6 years.

Diet and Food Crops

The one food in the staple throughout the district, but plantains, maize and sweet potatoes for the higher altitudes and rice on the lake shore are generally eaten, with additions that vary from area to area.

Maize is planted both on contoured ridges and on flat land. Holes are drilled generally 2 feet apart and each hole has 3 seeds planted in it. Maize is usually interplanted with beans or Bambara groundnuts, groundnuts, cowpeas or pigeon peas. Planting takes place in the highlands in July to September and harvesting in February to April. In the medium altitudes, two crops are planted annually, in November to February and again in May to June. In the lower altitudes, however, little maize is grown and this is sown in November to December and harvested in March and April. Maize is stored in mud-covered basket granaries or is sold as soon as it is dried. It is eaten roasted or boiled with beans. The varieties of maize grown vary but they are mostly of the hard flint type.

245 Bananas and plantains are grown all over the district except in the highlands to the north and west. Numerous local varieties abound, with a red plantain and the *Sukari* variety of banana as recent introductions, and are used exclusively for food, no beer being made. They are mostly dried and pounded with pestle and mortar to be used as flour, although they are also eaten whole after roasting.

244 Sweet potatoes are extensively grown. They are planted on contoured ridges from 3-4 feet high. Planting distances vary from 6 inches to 1 foot in either direction. They are planted in March to May and north of Takoyo take eight months to mature, but south of that place four months is sufficient. Sweet potatoes are eaten boiled or roasted.

243 Finger millet is used more for beer-making than for food. It is always sown broadcast in November to January and harvested in March to May. The land is first hand-hoed and all grass put into heaps and burnt when dry. In the highlands to the west the trees are lopped and branches piled in heaps to be burnt. Contoured ridges are put in at intervals depending on the slope of the land. The harvesting is carried out just before the grain is ripe by cutting off the heads and stacking in the field while ripening proceeds. The heads are then collected into large baskets and steeped in water for a day, after which they are taken out and rubbed with the hands to separate the grain from the chaff. The millet is then dried and stored in earthenware pots or mud-covered baskets until required. It is reported that it can be stored for five or six years by this method, but I have not verified this personally.

244 Beans are nearly always interplanted with maize or sown in banana plantations and the local seed is of mixed varieties. They are eaten boiled as a relish with other food such as maize. The leaves are also eaten dried or fresh.

245 Groundnuts are grown in the medium and lower altitudes. Planting is November to February and harvested in April to July, they are dried in the shell and eaten raw.

243 Rice is grown on the lake shore and also in the neighbouring foothills. It is sown broadcast in November to February and harvested in May to August. Yields are fair high in the foothills, being about 6-7 bags of paddy to the acre. Many local varieties are grown, such as Mundiri, Mwangalia, and Marula. The hill rice is eaten boiled, but most is sold husked in the markets for purely local consumption.

[D38A]

241 Other foodstuffs grown are cassa-yams, cow peas, pigeon peas, Bambara groundnuts, ginger, cardamom, groundnuts, wheat, pumpkins, peppers, citrus, sugar cane and European vegetables, including a quantity of European potatoes.

[77]

Economic Crops

245 One of the main cash crops is coffee, which
[71] was introduced about 1898 by the Berlin Lutheran Mission, but it was not grown by natives until 1930 when an attempt was made to organize an industry. It had already been tried from 1924 onwards by Europeans but had gradually died out, giving place to tea.

245 Native coffee has not been truly successful and many reasons are suggested for this. In effect, the coffee suffers from many pests and diseases and yields are so low as to be almost uneconomical even to a tribe of very low individual annual income. It has become obvious that coffee can only be grown by natives if shaded by bananas and mulched heavily with banana trash.* Multiple-stem pruning is gaining favour.

Seedlings are planted out in December and the first crop is obtained four years after. The area planted rose in 1939 to 1,800 acres and the number of native planters to 7,864. Yields, however, are low, varying from 131.4 kg. to 20.4 kg. parchment to the acre. Shoot-bore and diamon and yellow and white borer are prevalent all over the coffee-growing area. Over the period since 1932 the price paid to natives has averaged an cents a kg. for parchment.

[134]

[136] All coffee is collected and sold by Native
[142] Authority after rough grading and, in order to encourage better preparation, much lower payments are made for the inferior grades. A native staff is employed to visit coffee plots and to give instructions, and it is noticeable that the quality of preparation varies with the price.

175 The cultivation of rice on the lake shore
● 243 was started by Chief Kyungu in 1896 with seed obtained from Arab traders in Nyasaland and the Moravian Mission issued further seed in 1898. Being an innovation, rice was not popular and little was grown except for small local sales. In 1917 the Government issued seed and tax was paid in rice instead of money. Interest was hereby aroused and the cultivation of rice was applied. In 1932 several other kinds of seed were issued and now sixteen varieties are found. "Faya", which was issued in 1929, gives the best yields and is the variety chiefly grown, other varieties being Bangala, Merula

[58]

243

297 and Maplus, although very little of these is sold. Ploughs have been introduced into the area on a *lo* list and the total number in use in 1942 is about 400. The first ploughing is carried out in June or July when the ground is still wet, and the second ploughing in October to February. Planting, which is all broadcast, is carried out in November to the middle of March and the harvesting is done in May to September.

298 A first mill was erected at Iyoyoma on the lake shore in 1942 with a capacity of 9 tons of rice in 13 hours. Another is now on its way from India with a capacity of 14 tons of rice in 13 hours and should be erected some time in 1944.

299 A small acreage of cotton is also sown along the Songwe River boundary, which borders on Nyasaland, with seed obtained from that Colony. Conditions, however, are not suitable on the remainder of the lake shore and cultivation is not encouraged.

300 301 A list of exports from the district with approximate weights for 1942 is appended:—

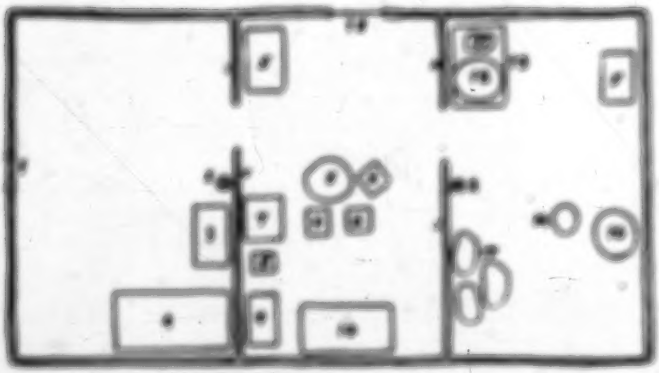
Article	Weight in tons
Wood bows	
Cattle	
Groundnuts	
Hides	
Ghee	
Simsim	
European produce	
Rice	
Vegetables	
Fish	
Tobacco, local	
Tobacco, Native	
Native cloth	
Tea (European produce)	
Total	4,000

Land Tenure and Economics of the People

302 In theory all land belongs to the chiefs or sub-chiefs, but in practice once a man has cultivated a plot, that plot belongs to him until he leaves the area to which he lives. If he leaves, the land reverts to the chief or sub-chief and may be given by him through his headman or elder to anyone in his area who is short of land or to a newcomer who wants a plot. Should a man go away and return after a long period and ask for a plot, he is bound to be given one but not necessarily the plot he had before he left. Newcomers are welcomed and are given land, as the amount of tax collected in an area is an indication of the importance of a chief.

303 Stock grazing is a problem which is coming more and more to the fore. The number of

12: Diegaard E-5 (1955) 1962 FNU? Ngonde FNU?
Nyakyusa



Baker's house. 1, barred window; 2, post supporting roof; 3, wooden door; 4, Baker's bed; 5, table; 6, chair; 7, cupboard; 8, chair with three entrants; 9, entrant; 10, table with beds; 11, bag; 12, large basket, divider; 13, low stand for 11 and 12; 14, coffee jars; 15, low partition; 16, divan to which the coffee is washed; 17, door to bags

cupboard. This aroused very average and a bit disorderly. On a chair were three entrants on top of each other.

It was interesting to see, in the store-room, the very crops that belong to the men, viz. rice and millet, the most valuable products. The rice was in bags, and it is quite probable that this man had bought it from the district near Lake Nyasa, where it thrives well. On higher ground, rice cannot be cultivated.

The millet was contained in a basket, 1 m in height, 33 cm broad at the bottom, and narrower, 23 cm, at the top.

Further, there was a large, beautiful earthenware jar, which he had bought. This was intended for the millet. And there was also a cylindrical container for the washing of the millet when it was brought home from the field. This vessel was 33 cm in height and 31 cm across.

All these houses had a small window with bars or shutters.

The inside of the houses lay in semi-darkness, as the only light is admitted through the doorway, and in some cases through the diminutive barred window. Nevertheless, the interiors give a nice impression, because of their pictures, bright, clear, and cheerful. And how cosy they are, when seen at night: the door is closed, you gather round the fire and delight in perfectly cooked rice, which is the favourite dish at the principal meal of the day.

Johnston says (1899, page 433) that the greater number of the houses are circular in their plan and very much like beehives in shape; their walls are wickerwork filled with mud cobs, and they have thatched roofs. He also reports

14: Lehmann E-5 (1939) 1951 F707 Ngonde F707
Nyakyusa

begin later and continue till noon or beyond. The energetic ones sometimes hoe again for an hour or two in the late afternoon. Different crops are planted at different seasons of the year so that there is always some hoeing to be done." (G. Wilson, Introduction, p. 260).

The putting of maize-grains as seed into the earth is the women's work, the sowing of millet (*wuleni*) of both sexes. If you ask the men after they had come home from their work: "*Mukumbide ifiswaga fye sungi?*", "Whose fields did you hoe?", the answer often may be: "*Tukumbide ifiswaga fye tata!*" We have hoed the fields of our father.

In former times, the Nyakyusa had a lot of ceremonies relating to the beginning of the hoeing season and of the beginning of the harvest-work. They are, however, nowadays nearly extinguished under the influence of European culture.

With respect to the beginning of the hoeing season, a very comprehensive ceremony had to be carried out by the chief in community whith the *ungenga* (medicine man) for providing the fields with extraordinary *(i-ninga) power (amaka): amaka amaninga*, in this case: fertility.

When the crop was ripe, it was (at first) forbidden (*wuziko*) to take anything from the crop before the chief had given the permission. First the oldest male villagers informed the chief that it may be now the just time to give the crop free for the people, saying: "The people is hungry, we will now give them to eat!" Then the chief ordered that 6 or 8 (*maine'*) corn-cobs were brought to him, and he sent these corn-cobs by a messenger to the (holy) offering-grove where they must be put down. After that has been correctly executed, he gave the permission for reaping the new crop.

(NB. It was believed that those corn-cobs put into the offering-grove were eaten especially from the leopards. The powderes bones of the leopards were considered important ingredients of the consecration drink which the chief had to take at his initiation ceremonies and which should give him the strength (*amaka*) of a leopard, so that he also was called "the leopard" or "the leopard chief".)

4. *Herding the Cattle and Cleansing the Stable.* The sociological importance of cattle among the Nyakyusa and the specific practice among them of herding the cattle by herdboys, that is also of highly sociological importance for the structure of the Nyakyusa society, is already described by G. Wilson (Introduction, p. 269 f).

The cleansing of the *viskins* of which the Nyakyusa possess a great number of very well built ones, which have also sometimes a considerable length — apart from the cattle kraals —, is the task of

14:Lehmann E-5 (1939)1951 F707 Ngonde F707
Nyakyusa

The tender leaves of pumpkins and taro plants (*amasimbi*, leaves of taro), as well as of a number of other plants growing wild (*indeke*) are also used as vegetables. This food is called *ineke*, a word denoting all sorts of green vegetables.

In his treatise on "The Land Rights of Individuals among the Nyakyusa" (The Rhodes-Livingstone Papers, No. 1; 1938, p. 43). G. Wilson points out that the fruit of the *so* — called *unepupuli* — tree is "both delicious to eat and also full of seeds which are dried and crushed for ointment (*ingemba*)", but he adds that he had been unable to find out the botanical name of this useful tree. Perhaps the following passage in the article of Dr. Kerr Cross ("Notes on the Country Lying between Lakes Nyasa and Tanganyika"; Proc. Roy. Geogr. Inst. N.S.Vol. XIII, 1891, p. 98) may be helpful in this connection: "There is a tree of the sycamore family which grows extensively all over the north of the lake called *mwiyungute* by the natives which might be developed. It is a most picturesque tree which produces a food, an oil, and a dye. The oil or fat, when cool, is solid, even at a tolerably high temperature, and is like beeswax. It burns well as a night-light, and with wax might be made into candles. In a rude way I have made candles of it. It might also make an excellent soap."

As an adjunct to these foods curdy milk (*ulukoma ulukafu*) is very much esteemed[1], to say nothing of the various types of beer, mostly prepared from millet for the men. Large fields of millet are, therefore, to be seen everywhere in the land of the Nyakyusa. On one occasion I attended a beer drink in the hut of a chief. The conduct of the natives present, the chief and his advisers (*amafumu*), was in every respect praise-worthy. Pleasant and interesting stories were narrated. Not infrequently the invitation of a commoner who has had some differences with his chief or one of the *amafumu* to such a feast is regarded as a gesture of reconciliation.

As in the time of Sir H. H. Johnston so also to-day "all the cosy-meadows are planted with rice." A traveller coming from the hilly region to the north on nearing Lake Nyasa is struck by numerous large fields of rice in the plain at the northern end of the lake.

11. Crafts. Mackenzie (1925) is certainly justified in complains of the decay of the arts and crafts among the Nyakyusa. The Indian and European influence is to be seen everywhere in the deterioration and final dissolution of these branches of the ancient culture of the Nyaky-

[1] A. Wilson, Introduction, p. 188.